HOSPITAL AUTHORITY

CICO's Biweekly Update

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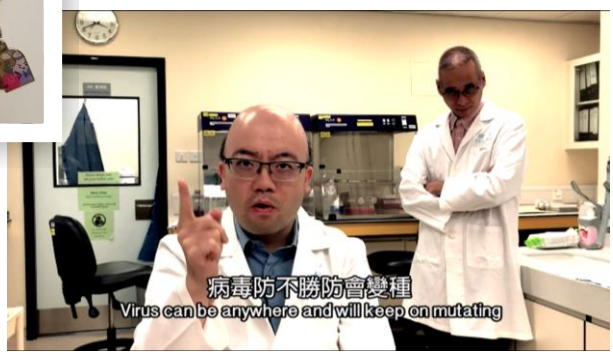
The Best Rap Song of 2019 - 流感大王《You 針、I 針!》

Check out the best rap song of 2019! A new hit was produced by HKEC Flu Vaccine Promotion Team with local popular hip-hop artists 抗流感三子 (Lai Kei, Louis and Vincent). The song was composed and directed by Mr Billy Wong. Various hip hop singers including Dr C C Luk, Dr Beatrice Cheng, Mr Ben Hui, Mr Harris Lam, HKEC staff and infection control team participated in the performance to promote staff seasonal influenza vaccination.

Dr CC Luk (HKEC CCE)



Dr Alan Wu (RTSKH ICO) and Dr Rodney Lee (HKEC ICO)

Current Topic: First Vaccine to Protect Against Ebola Virus Disease (EVD)

Ervebo (rVSV-ZEBOV-GP) has been recommended by European Medicines Agency for granting it a conditional marketing authorisation in the European Union on 18 Oct 2019. This is followed by World Health organization (WHO) prequalified the vaccine on 2 Nov 2019 for meeting WHO standards for quality, safety and efficacy. WHO said that with a prequalified vaccine and experimental therapeutics, Ebola virus disease becomes preventable and treatable.

Photo from Medscape

Ervebo is a genetically engineered, replication-competent, attenuated live vaccine for protection against EVD in humans following one dose administration. Studies in Africa, Europe and the US had tested Ervebo to be safe, immunogenic and effective against Zaire Ebola virus in West Africa in 2014-2016.

In the current EVD outbreak in Democratic Republic of the Congo, the vaccine demonstrated a 97.5% vaccine effectiveness.The Ervebo vaccine has not been licensed yet and licensed doses will only be available in mid-2020.

Reference:

1. First vaccine to protect against Ebola, European Medicines Agency https://www.ema.europa.eu/en/news/first-vaccine-protect-against-ebola
2. WHO. Preliminary results on the efficacy of rVSV-ZEBOVGP Ebola vaccine using the ring vaccination strategy in the control of an Ebola outbreak in the Democratic Republic of the Congo: an example of integration of research into epidemic response. https://www.who.int/csr/resources/publications/ebola/ebola-ring-vaccination-results-12-april-2019.pdf?ua=1
3. WHO prequalifies Ebola vaccine, paving the way for its use in high-risk countries https://www.who.int/news-room/detail/12-11-2019-who-prequalifies-ebola-vaccine-paving-the-way-for-its-use-in-high-risk-countries

Update on HA Guideline on the Control of Vancomycin-Resistant Enterococci (VRE)

The guideline on the control of VRE has been reviewed and released (version 7). The major changes are highlighted below for easy reference:

1. Median duration of VRE colonization in affected patient's gastrointestinal tract was updated to 65 – 140 days.
2. Definition of VRE was updated as isolates of *Enterococcus faecalis* or *Enterococcus faecium* which are resistant to vancomycin.
3. The timing for taking screening specimens (antimicrobials given for treatment of VRE infection) was updated to at least 48 hours after completing the anti-VRE antimicrobial treatment.
4. Rescreening for patient on every subsequent readmissions within 12 months from the date of second set of consecutive negative screening to detect any relapse of VRE carriage (except day case), with a tag in Clinical Management System (CMS) alert for VRE clearance date, was included.
5. The duration of tagging VRE carriers without follow-up screening was updated as 2 years from the last positive specimen.
6. Local scenarios when extended screening should be considered were included.
7. Contact tracing related to a confirmed VRE case detected through a clinical specimen under different circumstances was updated. At least one negative screening should be obtained from the contact case.
8. After detection of a confirmed VRE case through surveillance culture or contact tracing, further contact tracing would be restricted to the cubicle where the confirmed case stayed.

For details, please visit http://ha.home/ho/ps/Guideline_Control_VRE.pdf.

Symposium on Advanced Infection Control 2019

Standardized Central Line Insertion Site Assessment for Prompt Response

Central line associated bloodstream infections (CLABSI) are preventable healthcare-associated infections resulting in high morbidity and mortality. 40% of CLABSI is caused by extra luminal contamination at the insertion site and national guidelines recommend daily assessment for risk of infection.

Professor Susan Huang shared a quality improvement program at UC Irvine Health. The interventions of standardizing the assessment and promoting timely catheter removal included

1. A central line insertion site assessment (CLISA). It standardized the evaluation of the catheter insertion site by defining the local inflammation or infection, quantified the degree of erythema in reference to the standardized width of a central venous catheter (3mm), and provided action for each category of erythema (figure 1).
2. Integration of the CLISA score into electronic nursing document. After the nurse had entered the CLISA score, it could be automatically transferred to physician daily progress note and physician must then attest to actions for CLISA score of 2 or 3.

A pre- and post-intervention test on the program found that

- The implementation of CLISA score improved insertion site documentation among nurses and doctors, (92% compliance in nursing documentation and 100% in physician progress notes) due to the automated process linking nursing documentation with physician notes.
- It also successfully promoted high compliance in prompt catheter removal. Compared to the baseline period, the percentage of central lines with a CLISA score of 2 or 3 decreased by 78.2% in intervention periods.

Central Line Insertion Site Assessment (CLISA) Score

Score	Category	Description	Action
0	Normal Appearance	- Skin is flesh-colored - No erythema, localized swelling, or drainage	Continue serial assessments
1	Minimal Erythema	- **Insertion site erythema < 3 mm radius (< 1 catheter width)** - Drainage/crusting scant, non-cloudy if present* - No localized swelling at insertion site	**RN:** Verbal communication with next shift RN **MD:** Acknowledge RN assessment in progress note
2	Advancing Erythema	- **Insertion site erythema 3-6 mm radius (1-2 catheter widths)** or worsening within 24 hours - Localized swelling at insertion site may be - Drainage/crusting is non-cloudy, if present*	**RN:** Verbal notification to MD **MD:** Strongly consider line removal. If not removed, document reason and plan
3	Severe Erythema *OR* Purulence	- **Purulent (cloudy) drainage/crusting *OR*** - **Erythema >6mm (>2 catheter widths), or rapid worsening in size/brightness** - Focal swelling (common, not required)** - Erythema not required if purulence present	**RN: Page MD** **MD: Order immediate line removal. If cannot remove today, document plan to remove**
NV	Insertion site not visible	Assessment not possible due to obscured insertion site. Skin that is visible appears normal.	Document "not visible"

*Bleeding without erythema excluded.
**Specifically related to insertion site. Not intended to refer to anasarca or limb swelling.

Figure 1: Central line insertion site assessment (CLISA) score

Reference:
Gohil, S. K., et al. (2019) Impact of a Central-Line Insertion Site Assessment (CLISA) score on localized insertion site infection to prevent central-line-associated bloodstream infection (CLABSI). Infection Control and Hospital Epidemiology. November 8th. doi: 10.1017/ice.2019.291.